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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,647	09/22/2003	Li Ji	SAMS01-00299	1121
23990	7590	01/26/2005	EXAMINER	
DOCKET CLERK P.O. DRAWER 800889 DALLAS, TX 75380			YAO, KWANG BIN	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,647	<b>Applicant(s)</b> JI ET AL.	
	<b>Examiner</b> Kwang B. Yao	<b>Art Unit</b> 2667	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/12/04, 3/3/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 21-40 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,625,134. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application's claims merely broaden the scope of the patented claims by not claiming some elements.

The following is the comparison between the patented claims and the claims in the instant application. U.S. Patent No. 6,625,134 claims the following limitations: regarding claim 1, For use in a wireless network comprising a plurality of base transceiver stations, each of said base transceiver stations capable of establishing and maintaining communication links with a plurality of a mobile stations by means of at least one overhead channel and a plurality of data traffic channels, an apparatus for allocating said plurality of data traffic channels comprising: at least one of: a failure detection circuit capable of detecting a failure in said at least one overhead

Art Unit: 2667

channel of a first base transceiver station and generating a failure notification; and an access request detection circuit capable of detecting an access request message received from an accessing one of said plurality of mobile stations and generating an access request notification; and a channel allocator capable of receiving at least one of said failure notification and said access request notification and, in response thereto, terminating a first communication link between said first base transceiver station and a first selected one of said plurality of mobile stations, wherein said first selected mobile station maintains at least a second communication link with at least a second base transceiver station, and at least one of: reconfiguring a first data traffic channel associated with said terminated first communication link as a replacement overhead channel replacing said failed overhead channel; and allocating said first data traffic channel associated with said terminated first communication link to establish a communication link with said accessing mobile station; regarding claim 2, the apparatus set forth in claim 1 wherein said channel allocator is capable of determining if one of said plurality of data traffic channels associated with said first base transceiver station is unused prior to terminating said first communication link between said first base transceiver station and said first selected mobile station; regarding claim 3, The apparatus set forth in claim 2 wherein said channel allocator reconfigures an unused one of said plurality of data traffic channels associated with said first base transceiver station as said replacement overhead channel in lieu of terminating said first communication link and reconfiguring said first data traffic channel associated with said terminated first communication link; regarding claim 4, The apparatus set forth in claim 2 wherein said channel allocator allocates an unused one of said plurality of data traffic channels associated with said first base transceiver station to establish a communication link with said

Art Unit: 2667

accessing mobile station in lieu of terminating said first communication link and allocating said first data traffic channel associated with said terminated first communication link to establish a communication link with said accessing mobile station; regarding claim 5, The apparatus set forth in claim 1 further comprising a memory coupled to said channel allocator, wherein said memory is capable of storing status data associated with said first communication link; regarding claim 6, The apparatus set forth in claim 5 wherein said status data comprises a received signal strength indicator associated with said first communication link; regarding claim 7, the apparatus set forth in claim 5 wherein said status data comprises handoff state data, wherein said handoff state data indicates whether said first selected mobile station associated with said first communication link maintains said at least a second communication link with said at least a second base transceiver station; regarding claim 8, the apparatus set forth in claim 7 wherein said handoff state data indicates a total number of communication links said first selected mobile station maintains with other ones of said plurality of base transceiver stations; regarding claim 9, a wireless network comprising: a plurality of base transceiver stations, each of said base transceiver stations capable of establishing and maintaining communication links with a plurality of a mobile stations by means of at least one overhead channel and a plurality of data traffic channels; and at least one apparatus for allocating said plurality of data traffic channels comprising: at least one of: a failure detection circuit capable of detecting a failure in said at least one overhead channel of a first base transceiver station and generating a failure notification; and an access request detection circuit capable of detecting an access request message received from an accessing one of said plurality of mobile stations and generating an access request notification; and a channel allocator capable of receiving at least one of said failure notification

Art Unit: 2667

and said access request notification and, in response thereto, terminating a first communication link between said first base transceiver station and a first selected one of said plurality of mobile stations, wherein said first selected mobile station maintains at least a second communication link with at least a second base transceiver station, and at least one of: reconfiguring a first data traffic channel associated with said terminated first communication link as a replacement overhead channel replacing said failed overhead channel; and allocating said first data traffic channel associated with said terminated first communication link to establish a communication link with said accessing mobile station; regarding claim 10, the wireless network set forth in claim 9 wherein said channel allocator is capable of determining if one of said plurality of data traffic channels associated with said first base transceiver station is unused prior to terminating said first communication link between said first base transceiver station and said first selected mobile station; regarding claim 11, the wireless network set forth in claim 10 wherein said channel allocator reconfigures an unused one of said plurality of data traffic channels associated with said first base transceiver station as said replacement overhead channel in lieu of terminating said first communication link and reconfiguring said first data traffic channel associated with said terminated first communication link; regarding claim 12, the apparatus set forth in claim 10 wherein said channel allocator allocates an unused one of said plurality of data traffic channels associated with said first base transceiver station to establish a communication link with said accessing mobile station in lieu of terminating said first communication link and allocating said first data traffic channel associated with said terminated first communication link to establish a communication link with said accessing mobile station; regarding claim 13, The wireless network set forth in claim 9 wherein said apparatus further comprises a memory coupled

Art Unit: 2667

to said overhead channel controller, wherein said memory is capable of storing status data associated with said first communication link; regarding claim 14. The wireless network set forth in claim 13 wherein said status data comprises a received signal strength indicator associated with said first communication link; regarding claim 15, The wireless network set forth in claim 9 wherein said status data comprises handoff state data, wherein said handoff state data indicates whether said first selected mobile station associated with said first communication link maintains said at least a second communication link with said at least a second base transceiver station; regarding claim 16, the wireless network set forth in claim 15 wherein said handoff state data indicates a total number of communication links said first selected mobile station maintains with other ones of said plurality of base transceiver stations; regarding claim 17, for use in a wireless network comprising a plurality of base transceiver stations, each of the base transceiver stations capable of establishing and maintaining communication links with a plurality of a mobile stations by means of at least one overhead channel and a plurality of data traffic channels, a method for allocating the plurality of data traffic channels comprising the steps of: at least one of: detecting a failure in the at least one overhead channel of a first base transceiver station; detecting an access request message received from an accessing one of said plurality of mobile stations; and in response to at least one of the failure detection and the access request message detection, terminating a first communication link between the first base transceiver station and a first selected one of the plurality of mobile stations, wherein the first selected mobile station maintains at least a second communication link with at least a second base transceiver station; and at least one of: reconfiguring a first data traffic channel associated with the terminated first communication link as a replacement overhead channel replacing the failed overhead channel;

Art Unit: 2667

and allocating the first data traffic channel associated with the terminated first communication link to establish a communication link with the accessing mobile station; regarding claim 18, the method set forth in claim 17 further comprising the step of determining if one of the plurality of data traffic channels associated with the first base transceiver station is unused prior to terminating the first communication link between the first base transceiver station and the first selected mobile station; regarding claim 19, The method set forth in claim 18 further comprising the step of reconfiguring an unused one of the plurality of data traffic channels associated with the first base transceiver station as the replacement overhead channel in lieu of terminating the first communication link and reconfiguring the first data traffic channel associated with the terminated first communication link; regarding claim 20, The method set forth in claim 17 further comprising the step of allocating an unused one of the plurality of data traffic channels associated with the first base transceiver station to establish a communication link with the accessing mobile station in lieu of terminating the first communication link and allocating the first data traffic channel associated with the terminated first communication link to establish a communication link with the accessing mobile station.

The instant application discloses the following limitations: regarding claim 21, For use in a wireless network comprising a first base transceiver station capable of establishing and maintaining a plurality of communication links with a plurality of mobile stations by means of a plurality of data traffic channels and at least one overhead channel, an apparatus for allocating said plurality of data traffic channels comprising: a failure detection circuit capable of detecting a failure in said at least one overhead channel of said first base transceiver station and generating a failure notification; and a channel allocator capable of receiving said failure notification and, in



Art Unit: 2667

response thereto: 1) terminating a first communication link between said first base transceiver station and a first selected one of said plurality of mobile stations, wherein said first selected mobile station maintains at least a second communication link with at least a second base transceiver station of said wireless network, and 2) reconfiguring a first data traffic channel associated with said terminated first communication link as a replacement overhead channel replacing said failed overhead channel; regarding claim 22, The apparatus as set forth in Claim 21 wherein said channel allocator is capable of determining if one of said plurality of data traffic channels associated with said first base transceiver station is unused prior to terminating said first communication link between said first base transceiver station and said first selected mobile station; regarding claim 23, The apparatus as set forth in Claim 22 wherein said channel allocator reconfigures an unused one of said plurality of data traffic channels associated with said first base transceiver station as said replacement overhead channel in lieu of terminating said first communication link and reconfiguring said first data traffic channel associated with said terminated first communication link; regarding claim 24, The apparatus as set forth in Claim 21 further comprising a memory coupled to said channel allocator, wherein said memory is capable of storing status data associated with said plurality of communication links maintained by said first base transceiver station with said plurality of a mobile stations; regarding claim 25, The apparatus as set forth in Claim 24 wherein said status data comprises a received signal strength indicator associated with each of said plurality of communication links; regarding claim 26, The apparatus as set forth in Claim 25 wherein said status data comprises handoff state data indicating whether each mobile station associated with each of said communication links maintains communication links with at least two base transceiver stations; regarding claim 27,

Art Unit: 2667

The apparatus as set forth in Claim 26 wherein said channel allocator determines a weakest received signal strength indicator associated with one of said plurality of mobile stations maintaining communication links with at least two base transceiver stations; regarding claim 28, The apparatus as set forth in Claim 27 wherein said channel allocator selects said communication link associated with said weakest received signal strength indicator to be said terminated first communication link; regarding claim 29, A wireless network comprising: a plurality of base transceiver stations, wherein each of said plurality of base transceiver stations is capable of establishing and maintaining a plurality of communication links with a plurality of mobile stations by means of a plurality of data traffic channels and at least one overhead channel; and an apparatus associated with a first one of said base transceiver stations for allocating said plurality of data traffic channels associated with said first base transceiver station, said apparatus comprising: a failure detection circuit capable of detecting a failure in said at least one overhead channel of said first base transceiver station and generating a failure notification; and a channel allocator capable of receiving said failure notification and, in response thereto: 1) terminating a first communication link between said first base transceiver station and a first selected one of said plurality of mobile stations, wherein said first selected mobile station maintains at least a second communication link with at least a second one of said plurality of base transceiver stations of said wireless network, and 2) reconfiguring a first data traffic channel associated with said terminated first communication link as a replacement overhead channel replacing said failed overhead channel; regarding claim 30, The wireless network as set forth in Claim 29 wherein said channel allocator is capable of determining if one of said plurality of data traffic channels associated with said first base transceiver station is unused prior to terminating said first

Art Unit: 2667

communication link between said first base transceiver station and said first selected mobile station; regarding claim 31, The wireless network as set forth in Claim 30 wherein said channel allocator reconfigures an unused one of said plurality of data traffic channels associated with said first base transceiver station as said replacement overhead channel in lieu of terminating said first communication link and reconfiguring said first data traffic channel associated with said terminated first communication link; regarding claim 32, The wireless network as set forth in Claim 29 further comprising a memory coupled to said channel allocator, wherein said memory is capable of storing status data associated with said plurality of communication links maintained by said first base transceiver station with said plurality of a mobile stations; regarding claim 33, The wireless network as set forth in Claim 32 wherein said status data comprises a received signal strength indicator associated with each of said plurality of communication links; regarding claim 34, The wireless network as set forth in Claim 33 wherein said status data comprises handoff state data indicating whether each mobile station associated with each of said communication links maintains communication links with at least two base transceiver stations; regarding claim 35, The wireless network as set forth in Claim 34 wherein said channel allocator determines a weakest received signal strength indicator associated with one of said plurality of mobile stations maintaining communication links with at least two base transceiver stations; regarding claim 36, The wireless network as set forth in Claim 35 wherein said channel allocator selects said communication link associated with said weakest received signal strength indicator to be said terminated first communication link; regarding claim 37, For use in a wireless network comprising a first base transceiver station capable of establishing and maintaining communication links with a plurality of mobile stations by means of a plurality of data traffic

Art Unit: 2667

channels and at least one overhead channel, a method of allocating the plurality of data traffic channels comprising the steps of: detecting a failure in the at least one overhead channel of the first base transceiver station; in response to the failure detection, terminating a first communication link between the first base transceiver station and a first selected one of the plurality of mobile stations, wherein the first selected mobile station maintains at least a second communication link with at least a second base transceiver station; and reconfiguring a first data traffic channel associated with the terminated first communication link as a replacement overhead channel replacing the failed overhead channel; regarding claim 38, The method as set forth in Claim 37 further comprising the step of determining if one of the plurality of data traffic channels associated with the first base transceiver station is unused prior to terminating the first communication link between the first base transceiver station and the first selected mobile station; regarding claim 39, The method as set forth in Claim 38 further comprising the step of reconfiguring an unused one of the plurality of data traffic channels associated with the first base transceiver station as the replacement overhead channel in lieu of terminating the first communication link and reconfiguring the first data traffic channel associated with the terminated first communication link; regarding claim 40, The method as set forth in Claim 37 further comprising the steps of determining a weakest received signal strength indicator associated with one of a plurality of mobile stations maintaining communication links with the first base transceiver station and at least one other base transceiver station; and selecting the communication link associated with the weakest received signal strength indicator to be the terminated first communication link.

Art Unit: 2667

As stated above, claims 21-40 of the instant application disclose all the claimed limitations of claims 1-20 of U.S. Patent No. 6,625,134, except the features of: regarding claim 1, and an access request detection circuit capable of detecting an access request message received from an accessing one of said plurality of mobile stations and generating an access request notification; regarding claim 9, and an access request detection circuit capable of detecting an access request message received from an accessing one of said plurality of mobile stations and generating an access request notification; allocating said first data traffic channel associated with said terminated first communication link to establish a communication link with said accessing mobile station; regarding claim 17, detecting a failure in the at least one overhead channel of a first base transceiver station; allocating the first data traffic channel associated with the terminated first communication link to establish a communication link with the accessing mobile station.

The application's claims are nearly identical in every other respect to the patent claims. Therefore, the application's claims are simply broader version of the patented claims. It is the examiner's position that broadening the patented claims by not claiming the above elements of the patented claims would have been obvious to one of the ordinary skill in the art in view of the patented claims. It is important to note that the instant application is a continuation of the application which yielded the patent (U.S. Patent No. 6,625,134) used herein as the basis for the obviousness type of double patenting rejection. The application is attempting to broaden the parent application's claims by eliminating some the claimed elements in the continuation at issue here.

Art Unit: 2667

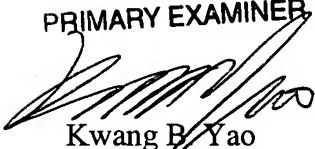
***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO  
PRIMARY EXAMINER



Kwang B. Yao  
January 21, 2005